

Watervliet Arsenal  
Powder Laboratory  
(Building 41, Officers' Club)  
Gibson Street south of the intersection  
of Gibson Street and Dalliba Avenue  
Watervliet  
Albany County  
New York

HAER No. NY-1G

HAER  
NY,  
1-WAVL,  
1/41-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record  
National Park Service  
Department of the Interior  
Washington, D.C. 20013-7127

HAER  
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HISTORIC AMERICAN ENGINEERING RECORD

WATERVLIET ARSENAL  
POWDER LABORATORY  
(Building 41, Officers' Club)  
HAER No. NY-1G

Location: Gibson Street south of the intersection of Gibson Street and Dalliba Avenue, Watervliet Arsenal, Watervliet, Albany County, New York.  
UTM: 18.606080.4730290  
Quad: Troy South

Date of Construction: 1840.

Present Owner and Occupant: U.S. Army.

Present Use: Officers' Club

Significance: The building represents early ammunition manufacturing and handling activity at the arsenal and was an adjunct facility to the Broadway shops. Together the laboratory and shops comprised Watervliet's manufacturing center from 1840 until the mid-1880s when the arsenal was designated the Army's gun factory.

Historian: Barbara E. Hightower, February 1985.

PART I. HISTORICAL INFORMATION

A. Physical History:

1. Date of erection: Plans for a laboratory were submitted to the Ordnance Department in April 1839 (Kyle, p. 88), and the arsenal's 1910 historical report lists 1840 as the date of construction for the building. No further documentation was found to substantiate this date, but the building does appear on the 1845 map of the arsenal (HAER Photo No. NY-1A-79).
2. Architect: The building was probably designed by personnel at the arsenal since the plans were submitted to the Ordnance Department by the arsenal's commander, Major Rufus L. Baker.
3. Original and subsequent owner: U.S. Army
4. Builder, contractor, suppliers: Not known.
5. Original plans and construction: No original plans or drawings were located. The building is represented on the 1845 map as a rectangular, gable-roofed structure with perpendicular, gable-roofed sections on the north and south ends. The porch configuration on the east and west sides appears to be part of the original design. In his April 1839 letter to the Ordnance Department, Baker noted that the building would have piazzas on the sides to "exclude storms and the sun" and to "furnish a shelter for stores during their receipt or delivery" (Kyle, p. 90).
6. Alterations and additions: Throughout its history, the building's exterior appears to have escaped major alterations. On the south side, two doors in arched openings were replaced with paired windows, and the remainder of the openings were bricked in at an undetermined date. A brick chimney with sloped shoulders was built at the north end of the east elevation by 1941. The central bay and half round window in the gable end were obliterated by the chimney. On the interior, partition walls have been added with changes in the use of the building and various remodelings. A fireplace with coursed stone mantel was also added on the east wall of the north room.

B. Historical Context:

This structure, erected adjacent to the Erie Canal and the arsenal's manufacturing shops in the early 1840s, originally served as a powder or ammunition laboratory. During the Mexican-American War, cartridges for muskets, rifles, carbines, pistols, and flint and

percussion arms were manufactured in the building (A History of Watervliet Arsenal, p. 26). It was still used for the manufacture of explosives in 1863 when the arsenal's commander, Colonel William A. Thornton, recommended closing the laboratory. By that time, production activity had increased in the shops area south and east of the building, and a powder explosion was considered a serious threat to the shops. Throughout the Civil War though, it appears to have been in use for the manufacture of ammunition (A History of Watervliet Arsenal, p. 60). At least by 1875, the building was converted to a Quartermaster office and engine room. The Quartermaster remained until about 1930 when the building was closed. Reopened in 1939, it housed reserve officers and shortly afterwards became the arsenal's recreation building. It is now the Officers' Club. (For further documentation see HAER No. NY-1A.)

## PART II. ARCHITECTURAL INFORMATION

### A. General Statement:

1. Architectural character: Although utilitarian in use, the design of this one-story, gable-roofed, brick structure incorporated classical detailing. The pilasters at the corners of the building are a common feature found on other structures erected at the arsenal during the 1840s.
2. Condition of fabric: The building is generally in good condition and is well maintained.

### B. Description of Exterior:

1. Over-all dimensions: This one-story, I-shaped building measures 106' (thirteen bays) x 42' 10" (four bays); the center section is 51' (seven bays) x 24' 6", and the north and south ends are 27' 6" (three bays) x 42' 10".
2. Foundations: Foundations are red sandstone.
3. Walls: Walls are orange brick laid in 5/1 common bond. Brick pilasters accent the corners of the building.
4. Structural system, framing: Walls are load bearing approximately 16" thick. Roof trusses are timber.
5. Porches: Porticos extend 51' across the east and west elevations. Each has six full and two engaged tapering Doric columns set on concrete bases. The floors are concrete. The roof of the building's center section covers each portico.

6. Chimneys: A single brick chimney with sloped shoulders is centered on the east elevation at the north end of the building.

7. Openings:

a. Doorways and doors: The main entrance in the fourth bay of the center section is a glazed wood personnel door with diamond lattice work and x-bracing flanked by fluted pilasters and topped by a broken pediment. The original door opening had a brick segmental-arch lintel which is partially visible behind the pediment. The rear entrance in the center of the west elevation is a paneled wood personnel door with jalousie window set under a brick segmental-arch lintel. Paneled wood personnel doors provide access to the north and south ends of the building from both porticos.

b. Windows: Typical windows are twelve-over-twelve-light, double-hung wood sash with stone or concrete sills and brick segmental-arch lintels. Windows on the south end are paired nine-over-nine-light, double-hung sash in what were originally round-arched door openings.

8. Roof:

a. Shape, covering: The gabled roofs of the north and south ends are set perpendicular to the gable of the center section. The entire roof is covered with asphalt shingles.

b. Cornice, eaves: The boxed eaves have returns at the gable ends.

C. Description of Interior:

1. Floor plans: The center section of the building contains a vestibule at the main entrance, a hall running north-south, a coat room and restrooms on the east side of the hall, a kitchen on the opposite side, and a dining room at the north end of the hall. A bar and dining area are in the south end and another dining room occupies the north end. (See supplemental material, floor plan)

2. Flooring: In the center section, the dining room and vestibule floors are tile; hall and coat room floors are wood parquet; and the restrooms and kitchen floors are covered with linoleum. The floors are wood parquet and carpeting in the south end, and varnished narrow-width boards in the north end.

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3. Wall and ceiling finish: Walls in the north end and the dining room in the central section are plaster that is papered above a chair rail. Kitchen walls have a formica splash. Walls in the south end are paneled and plastered. Remaining walls are covered with wallpaper. Rafters are exposed in the dining area in the north end. Remaining ceilings are accoustical tile.
4. Openings:
  - a. Doorways and doors: Typical doors are paneled wood personnel set in plain wood frames. The large opening between the north end and the center section is closed by a folding accordian-pleated door.
  - b. Windows: Windows are set in plain wood frames.
5. Decorative features and trim: The only fireplace is located on the east wall of the north end dining room. Set around a projecting chimney breast, the surround is heavy coursed stone with a stone mantel shelf. The rectangular opening is topped by a stone segmental arch. The hearth is stone.
6. Mechanical equipment:
  - a. Heating, air conditioning: The building is heated through baseboard units and cooled by window air conditioners.
  - b. Lighting: The north dining room is lit by three large multibranch brass chandeliers. Incandescent and fluorescent fixtures provide lighting elsewhere.
  - c. Plumbing: Plumbing fixtures are modern.

D. Site:

The building faces east onto Gibson Street south of Dalliba Avenue. To the east is the Benet Research and Engineering Laboratories, a sprawling, multiwinged, brick structure that originally housed the arsenal's manufacturing shops. A paved parking lot lies to the south of the building; the arsenal's small golf course is to the north; and the parade ground to the east. Until the early 1920s, the Erie Canal passed adjacent to the building on the west.

PART III. SOURCES OF INFORMATION

A. Architectural Drawings:

Floor Plan. 1946. Watervliet Arsenal Engineering Division.

Floor Plan. 1963. Watervliet Arsenal Engineering Division.

B. Early Views:

South and east elevations; office building demolished in 1901 is shown at the right. Taken before 1901. Watervliet Arsenal Museum. (HAER Photo No. NY-1G-3)

View of west side of building showing Broadway shops in rear. 1941. Watervliet Arsenal Museum. (HAER Photo No. NY-1G-4)

C. Bibliography:

Secondary and published sources:

Building Technology, Inc. Historic Properties Report Watervliet Arsenal, Watervliet, New York and Rotterdam Family Housing Area, Rotterdam, New York. January 1985. The report and inventory cards for the arsenal are filed as field records in the Prints and Photographs Division, Library of Congress under HAER No. NY-1A.

A History of Watervliet Arsenal, 1813 to Modernization 1982. Watervliet, New York: U.S. Army, Watervliet Arsenal, n.d. Lists uses of building.

Kyle, Francis K. A History of Watervliet Arsenal. Watervliet, New York: Watervliet Arsenal, 1920. Quotes 1839 correspondence describing the appearance of the laboratory to be built at the arsenal. Copy available in the Watervliet Arsenal Museum.

D. Likely Sources Not Yet Investigated:

Records of the Office of the Chief of Ordnance, Record Group 156, and Records of the Office of the Chief of Engineers, Record Group 77, Navy and Old Army Branch, Washington, D.C. should be further investigated.

E. Supplemental Material:

Main Floor Plan, Officers Open Mess, Building No. 41. No date.

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Watervliet Arsenal Engineering Division. Current floor plan of the building.

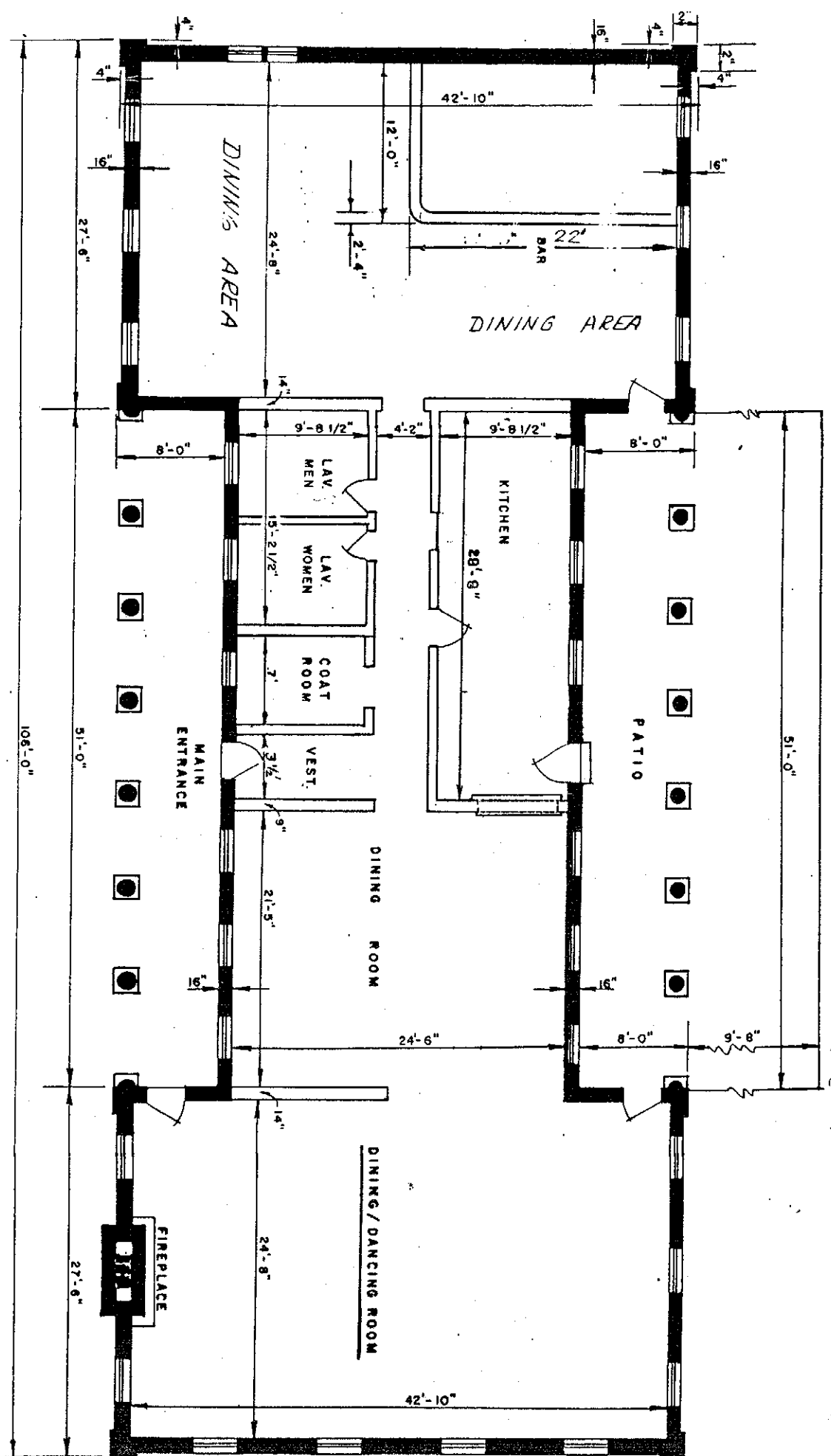
Prepared by: Barbara E. Hightower  
Historian  
MacDonald and Mack Partnership  
February 1985

#### PART IV. PROJECT INFORMATION

This project was part of a program initiated through a memorandum of agreement between the National Park Service and the U.S. Department of the Army. Stanley H. Fried, Chief, Real Estate Branch of Headquarters DARCOM, and Dr. Robert J. Kapsch, Chief of the Historic American Buildings Survey/Historic American Engineering Record, were program directors. Sally Kress Tompkins of HABS/HAER was program manager, and Robie S. Lange of HABS/HAER was project manager. Under the direction of William A. Brenner, Building Technology Incorporated, Silver Spring, Maryland, acted as primary contractor, and MacDonald and Mack Partnership, Minneapolis, was a major subcontractor. The project included a survey of historic properties at Watervliet Arsenal, as well as preparation of an historic properties report and HABS/HAER documentation for 17 buildings. The survey, report, and documentation were completed by Barbara E. Hightower, historian, Minneapolis. The photographs were taken by Robert A. Ryan and J Ceronie of Dennett, Muessig, Ryan, and Associates, Ltd., Iowa City, Iowa. Drawings were produced by Gary M. Louris, Minneapolis.

E. Supplemental Material  
Floor Plan

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NET FLOOR AREA  
3,390  
Square feet

FLOOR CAPACITY  
Per square foot

WATERVLIET ARSENAL

WATERVLIET, N.Y.

Drawn by: J.R. GANGLIA, A.E. App'd by: J.R. GANGLIA, A.E.

MAIN FLOOR PLAN  
OFFICERS' OPEN MESS  
BUILDING NO. 41

Revisions

Date

Scale: 3/32" = 1'-0" Date: